

RECEIVED

CORRES. CONTROL
INCOMING LTR NO.

2003 JUL 28 A 10:14

CORRESPONDENCE

STATE OF COLORADO

00698 RF03

CONTROL

Bill Owens, Governor
Douglas H. Benevento, Executive DirectorDUE DATE
ACTION

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, ColoradoLaboratory and Radiation Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090<http://www.cdphe.state.co.us>Colorado Department
of Public Health
and Environment

July 23, 2003

Mr. Joseph Legare
Assistant Manager for Environment and Stewardship
U.S. Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, Colorado 80403-8200

RE: Approval, Data Summary Report, IHSS Group 900-4&5 (PAC 900-175, S&W B980 Contractor Storage Facility), dated July 2003

Dear Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) has reviewed the subject document in response to the Division's comments.

The report is hereby approved as a No Further Accelerated Action (NFAA) document specific to PAC 900-175, the S&W Building 980 Contractor Storage Facility. PAC 1308, a Gasoline Spill Outside Building 980, was granted similar status (NFA) on February 14, 2002.

The Division's extensive comments on the draft addendum, dated November 2002 and including replacement pages dated March 11, 2003, were discussed and ultimately resolved with facility representatives. The comments, which included a high percentage with respect to data coverage and quality, are attached for reference.

The Division also received a version of the addendum dated June 2003. It could not be approved because it was not in the final form agreed to by the Division and did not contain illustrations, i.e., Figures 1 and 2.

If you have any questions regarding this correspondence, please contact me at (303) 692-3367 or Harlen Ainscough at 303-692-3337.

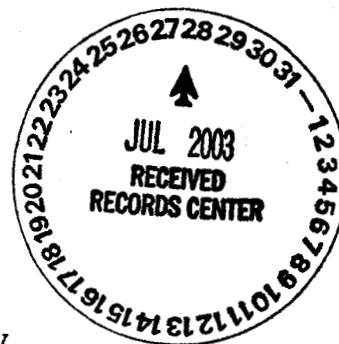
Sincerely,

Steven H. Gunderson
RFCA Project Coordinator

Attachment

cc: Rick DiSalvo, DOE
Norma Castaneda, DOE
Tim Rehder, EPALane Butler, KH
Dave Shelton, KH
Mark Sattelberg, U.S.F&W

Administrative Records Building T130G

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD

IA-A-001556

DIST.	LTR	ENC
BERARDINI, J. H.	X	X
BOGNAR, E. S.	X	X
CROCKETT, G. A.	X	X
DECK, C. A.	X	X
DEGENHART, K. R.	X	X
DIETER, T. J.	X	X
DIETERLE, S. E.	X	X
FERRERA, D. W.	X	X
FERRI, M. S.	X	X
GIACOMINI, J. J.	X	X
ISOM, J. H.	X	X
LINDSAY, D. C.	X	X
LONG, J. W.	X	X
LYLE, J. L.	X	X
MARTINEZ, L. A.	X	X
NAGEL, R. E.	X	X
NORTH, K.	X	X
PARKER, A. M.	X	X
RODGERS, A. D.	X	X
SHELTON, D. C.	X	X
SPEARS, M. S.	X	X
TRICE, K. D.	X	X
TUOR, N. R.	X	X
WILLIAMS, J. L.	X	X
BUTLER, L.	X	X
BROOKS, L.	X	X

COR. CONTROL X
ADMIN. RECORD X
PATS/130 XReviewed for Addressee
Corres. Control RFP7/28/03 by
Date By

Ref. Ltr. #

DOE ORDER #

NONE

1/5

Colorado Department of Public Health and Environment

Hazardous Materials & Waste Management Division

Comments

**Characterization Data Summary
IHSS Group 900-4&5**

November 2002

(with replacement pages)

dated

March 11, 2003

General Comments

1. The original intent of this Characterization Data Summary was to present data derived from six additional sample locations. Since the report is now intended to also serve as justification for NFAA (the Characterization Data Summary dated November 2002 cited no such expectation) all the data and process knowledge available for this IHSS group must be considered. To be consistent the title should be, "Data Summary Report." and it must address comments that would not have been made, necessarily, on the original document..
2. Since the document will be revised to support NFAA, not merely as a summarization of the six additional soil samples, most figures, tables and appendices will need to be revised to reflect all available data.
3. The Division's recent comments on the Trench 4 NFA (NFAA) and Ash Pits documents should be reviewed since NFAA documentation is the preferred course of action. Those sets of comments contain insights on the Division's preferences and expectations on the utilization of the proposed Soil Risk Screen, or subsequently, in the site wide RFI/RI-CMS/FS and CRA.

Specific Comments

4. **Section 2.0 First Bullet** - The first bullet states that all contaminants are below WRW ALs. It is assumed and must be clear that evaluation behind that statement includes the "legacy" data mentioned in the Section 4.0 - Completeness text. In particular, the "legacy" subsurface soil data must be used to determine if radionuclide data in the 0-3 foot depth interval are below action levels.
5. **Second Bullet** - The second bullet should be modified or eliminated since it implies that characterization data for each constituent was compared to Ecological Receptor ALs. In fact, none of the contaminants listed in Appendix B have any corresponding Ecological Receptor ALs. One of the current efforts of the CRA-Ecological working group is to expand the list of constituent to include all ecological values, i.e. those exceeding the Wildlife Refuge Worker, to ensure that such comparisons are readily achievable and accurate. A statement could be added to the first bullet explaining that there are currently no Ecological Receptor ALs corresponding to the contaminants of concern at IHSS Group 900-4&5:

"All contaminant concentrations are less than WRW ALs. There are currently no Ecological Receptor ALs corresponding to the contaminants of concern."

6. **Third Bullet:** Please eliminate the phrase, "at a POC", from the third bullet.
7. In addition, the statement suggests that no effort has been put forth to identify a potential impact, or to show, with some justification, that no such potential exists. The Division's Soil Remediation Objectives Policy (SROP) should be given consideration as a means to evaluate the potential impact. The policy provides source-size dependent values of "Soil Concentrations Protective of Groundwater" for many constituents that can then be related comparatively, or through modeling, to surface water standards. Although SROP defined concentrations are based on small source areas (100 square meters), hot spots within an IHSS may be within the size limit, or the SROP may provide the parameters for a size and site-specific calculation, or constituent-specific calculations.
8. Relative to Comment No. 7, an alternate approach may be to show the IHSS in the context of stewardship provisions to be established for the Industrial Area. That is, rather than focus on the potential individual contribution of the IHSS (or any IHSS), a comprehensive focus on monitoring and response may be acceptable to all stakeholders. It is noteworthy, however, that eliminating the IHSS (or any IHSS) from any future consideration, through application of the SROP, would mitigate the need to do so if an upset condition were to occur. The stakeholders should be informed and provided an opportunity for input on the preferred approach.
9. **Figure 2:** The number of constituents shown at the six (6) locations does not always correspond to the number of constituents listed at the corresponding locations in Table 2. It would be useful to list the sample location with each block of data. Less useful information could be eliminated, such as the depth interval, which is always the same and could be noted in the Key. Additionally, since the documents focus is to support NFAA, all data noted under "Completeness" on page 16 and meeting the M+2SD or MDL parameters will need to be added. An additional figure will need to be added if COCs in any soils below 0.5 feet exceed the parameters. A comprehensive report would better support the planned CRA.
10. **Table 2** – Dimethyl phthalate is misspelled in this table, Table 3, and in Appendix B.
11. **Table 3:** It appears that the column headings, or conversely, the data for Maximum Concentration and Average Concentration have been switched. It also appears that what are intended as Maximum Concentrations are actually MDLs or RLs relative to non-detects, which subsequently result in erroneous, and elevated, averages (but see Comment No.12). Numerous VOC data show the identical numerical values. Please query the original data set and correct the problems.
12. Because the Data Quality Assessment section provides little, if any, actual data to evaluate, for example duplicates, it is unclear why the Total Number of Samples Analyzed, per constituent, exceeds six (6). For example, Benzo(A)Anthracene shows eight (8) samples analyzed with only six-sample locations described in Table 1 and with the same six locations showing exceedances in Table 2. As a result, the Division was unable to account for the corresponding 87.50% Detection Frequency. What sample was non-detect for Benzo(A)Anthracene, a duplicate perhaps? It is also unclear whether duplicates were included in calculating average concentrations. In any case, it should be made clear that these averages were not used for comparison to action levels.
13. Please explain the data for Butyl Benzylphthalate, Naphthalene, etc. Eight samples were analyzed with no detections but averages and maximum values are shown. See Comment No. 11.
14. Please verify the number of samples analyzed for "Phenanthrene, 1-Methly-". Also, please verify that identification. Add a footnote to clarify the cause of the reduced number of samples, i.e. one.
15. The average concentrations of chromium, cooper and nickel are approximately 4, 2 and 3 times in respect to background mean + 2SD values. Relative to Comment Nos. 7 and 8, the potential for impact to ground water, then surface water, from these constituents should be evaluated or reflected in stewardship measures.

16. Cadmium shows 28 samples analyzed. Please address. It appears, a footnote or addition to the narrative may be needed.
17. Section 4.0, General Comment, The Data Quality Assessment describes the process but provides no specific data upon which conclusions on the adequacy of data have been based. It appears that the Division is expected to accept, at face value, that data of sufficient quantity and quality exist to support NFAA. From the Completeness section, it is clear that more than the additional six soil samples have been evaluated in respect to DQOs.
18. First Paragraph (page 14), The Division agrees that the DQO/DQA process is intended to ensure that data used in decision-making is defensible. However, the information presented does not enable the Division to independently assess the quality of the data. Whether the adequacy of the additional six data sets, or all data, is the focus, the data are not verifiable. Please address.
19. DQO Decisions: Please provide the SOR values calculated for all data points. It is not at all clear whether the SORs were calculated on the six samples or the samples noted in the Completeness section. If the SORs were only for the six additional samples, the earlier samples may exceed 1.0 and potentially negate NFAA. Please address the data comprehensively consistent with the revised focus of the document.
20. This paragraph also makes statements relative to RFCA Tier I action levels. Similar statements should be included relative to the new WRW action levels.
21. 2nd Paragraph (page 15), The statement suggests that the referenced tests have not actually been run. It is further unclear whether the six, or all, samples "would" show a 95% confidence of adequate sampling. Please address.
22. In addition, the Access database was not provided or properly referenced for availability to the Division. The availability of the QC evaluations in the database "PlanvsActuals2.mdb" needs to be documented.
23. Precision (page 16), The information presented does not support independent verification by the Division. Please address.
24. Representativeness, Some data were rejected. Knowing the locations/constituents for which valid data does not exist, followed by comparison to valid data/locations, would allow the Division to independently judge representativeness. For example, a rejection level of <10% meets a specified parameter but professional judgment should not be discounted in assessing sampling adequacy. Please address.
25. Completeness, The full complement of surface soil data is not discussed elsewhere in the document. Additionally, the listed sub-surface data are not discussed anywhere in the document. Please address.
26. Although the additional samples are mentioned, it is not apparent whether any contained constituents above MDLs or background. Also, see Comment No. 19.
27. Last Paragraph (page 16), Please clarify the statement that, "Anion action levels are much greater than the concentrations measured in the soils, thus there is no impact on decisions for the project." Table 3 of Attachment 5 of the proposed modification to RFCA, dated November 12, 2002, shows Soil Action Levels for Nitrite and Nitrate, only, relative to a WRW. If these are the "Anions", please be constituent specific. Given the raw data in Appendix A that shows somewhat elevated concentrations of nitrite and nitrate in soils relative to potential impacts to ecological resources and surface waters, the Division questions the manner in which relative anion levels have been reported. Based on application of the proposed Soil Risk Screen, should not further consideration of nitrite and nitrate at Screen 5 and 6 be undertaken if the document is to support NFAA? Please address nitrite and nitrate properly.
28. Last Sentence (page 16) The text indicates that anions were rejected. Table 5 shows the rejections were for constituents under EPA Methods SW6010 (Metals) not the 300 series methods applicable to nitrite/nitrate.

Anions are not specifically listed in Table 5. Please provide valid and consistent information. If valid anion data actually does not exist, the determination of "no impact" is highly questionable and poorly supported. Please address.

29. Comparability, No data has been provided to support the Division's independent verification of the factors.
30. Appendix A, No corresponding validation qualifiers have been provided consistent with Table 5. For example, which raw data were rejected? The Division is unable to independently verify that data are actually sufficient without being able to see where data are missing, spatially, in respect to other valid data. Please address.
31. Appendix B, Please correct the location codes. All data has been shown as if obtained from one (CK43-001) rather than six sampling sites. To support NFAA, all pertinent sample locations/data will need to be appended to the table. (The Division received a revised Appendix B based on the location error, but another revision is now necessary to reflect all data in support of NFAA.)